

Yandell (D. W.)

ADDRESS

BEFORE THE

AMERICAN MEDICAL ASSOCIATION,

PHILADELPHIA, MAY 7, 1872.

BY DAVID W. YANDELL, M. D.

PRESIDENT.



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GENTLEMEN: The migratory character of our Association is one of its best features. If it were stationary its meetings would no doubt be attended by many, and it would, while conducted with wisdom and moderation, exert a good influence upon the profession all over the country. But its influence is incalculably enhanced by its journeyings from point to point. In this way multitudes are brought into sympathy with it who otherwise would never attend one of its meetings or read a page of its proceedings. Whatever else may be denied the Association, no one can hesitate to admit that it is grand in its annual migrations. No other medical body ever in the same time traversed spaces so vast. Last year we met on the western slopes of the Rocky Mountains, and sat with the sound of the many-voiced Pacific in our ears. This year we have assembled on the eastern side of the Alleghanies, and our foreheads are bathed in the gales of the Atlantic. None of us who were privileged to be present at

that meeting in San Francisco can ever forget the circumstances attending it. We were introduced to a new world; trees, birds, quadrupeds of new species; an empire which, though the growth of but a quarter of a century, excites the wonder and admiration of mankind.

If the novelty of the scene rendered our meeting in California one of peculiar interest, the meeting here is not less interesting on account of the historical associations of the city in which we are convened. San Francisco is the most recently erected of all our great cities. Philadelphia is the most ancient of all our great medical centers. It is, in a sense, the cradle of American Medicine. Here medical teaching was formally inaugurated on this continent. We seem to hear again this morning the confident words of Dr. John Morgan, spoken one hundred and seven years ago, as he pleaded for the medical independence of the colonies, and proved to the satisfaction of the citizens of Philadelphia that the time had come when America should have a medical school of her own.

That first faculty, composed of Morgan, Kuhn, Shippen, Bond, and Rush, rises to our mind as we enter on our duties here to-day. The old-school, elegant Shippen, sitting, not very gracefully, on his three chairs, and essaying to teach anatomy, and surgery, and midwifery. The rigid, stately Adam Kuhn, his hands and bosom in ruffles, his exuberant hair done up by his hair-dresser in the style of an imposing wig, presenting with his gold-headed cane a perfect picture of the grave doctor of the preceding age; punctual to the half minute—beginning his lectures just as the clock pealed its last stroke; waiting for the physician who was to meet him in consultation the five minutes of grace, then stalking out of the sick-room, perhaps to encounter his tardy brother on the stairway or the door-steps, but hardly pausing long

enough to hear the delinquent's excuse, and never turning back. Rigidly exact in his prescriptions, he has just ordered a patient some weak sage-tea. The kindly nurse meekly suggests as he walks away, "I suppose, doctor, I may give the patient a little toast-water, or lemonade, too, if she craves it?" And we see him turning round with the solemnity of one who seemed to feel that life hung upon his words, and hear his incisive reply, "I have said sage-tea; good morning, madam." And how strangely sounds to us that declaration of the old professor of practice made near the close of his life: "If called upon to say with what remedies I have done most good in my long practice, I should name the volatile alkali and wine whey!"

But in that group of professors, untried as yet, rises far above the rest that figure so familiar to us all, with its meditative face and calm, expansive brow, the philosophic, active-minded Rush. He has just returned from Edinburgh, where he listened to the lectures and enjoyed the friendship of the great Cullen. In all the five years of his pupilage he tells us he never wasted a day in amusement. He has entered into his profession with his whole soul. At the early age of twenty-four he has been elected professor of chemistry. We pursue his steps along his brilliant course as statesman, philanthropist, physician, author; a signer of the Declaration of Independence; a writer on temperance, on insanity, on medical education; author of medical histories so full and graphic that he is soon styled "the American Sydenham." We see him, year after year, battling with the fever that devastated his city, and with his brethren about calomel and jalap and blood-letting. We read with absorbing interest his accounts of the wasting epidemic, and are thrilled by a passage in his diary, entered at the close of one of his terrible days, just

after adopting a new mode of practice: "I have visited one hundred patients to-day, and, thank God! not one of them has died." His terse, sagacious remarks, repeated everywhere by his pupils till they became household words with the people, come back to us as we meet here where he was so long the master-spirit of the profession. Consulted by our grandfathers in Charleston, in Georgia, in the wilds of Kentucky and Tennessee, he was acknowledged everywhere the head of the profession in America. Students flocked to him as they had done before to Cullen at Edinburgh and to Boerhaave at Leyden. Sitting here in his chair of theory and practice, he gave laws, as nearly as physician could ever give law, to the profession of a continent, and has left behind him a name the most resounding in our medical annals.

With Rush, after a time, was Caspar Wistar in anatomy, which his eloquence made attractive. No medical man can hear Philadelphia named and not think of Wistar, whose work on anatomy, the first work on the subject by an American, was long a text-book in all our medical schools. Physick too rises up among the great names that gave renown to the school at a later period. Cold in manner, unsocial, but grand in the simplicity of his character, he walked the streets of Philadelphia five years, as he has told us, before he made money enough to pay for his shoe-leather. And with him is associated the name of his nephew, Dorsey, author of the first American system of surgery, who, unfortunately for the profession, was cut off in his early prime. Prominent among the foremost was one whom many of you have seen, the first President of our Association—the generous, witty, genial, eloquent Chapman, upon whom fell the mantle of Rush when that great man left the earth. You who saw him at Baltimore twenty-four years ago, as he stood up to deliver his inaugural

address, can never forget his form, his face, his voice, his whole bearing and manner as that of one who felt that the dignity of a great profession rested on him. In this city too lived for a short time, adorning the profession by his varied labors, the brilliant Godman, at once physician, poet, and philosopher; but, like Dorsey, dying young.

The last link which bound the present with the past has just been parted. I allude to Dr. Samuel Jackson. Who that remembers his silvery locks, his sparkling eyes, and the sweet and winning smile that overspread his countenance as he expounded his favorite doctrines, can wonder how readily they were accepted as true? What he was in the beginning and in his prime, he continued to the last years of his patriarchal old age. Keen to perceive, eager to learn, earnest to instruct, a man whose attachment to his profession was not that which springs alone from habit or from gratified ambition, but an ardent love which burned brighter and brighter until it was extinguished by the hand of death.

With these eminent names are associated those of Dewees, Hare, Hartshorne, Horner, Meigs, Mutter, Mitchell, Dunglison, and a long list of others that will live in history. They crowd upon our memories as we walk along the streets that once resounded with their footsteps—through a city rendered illustrious by their labors. They have left successors worthy of their great reputation, who have made the air of Philadelphia luminous with their works.

It is an interesting coincidence that the cradle of American medical education should also be the cradle of the American Medical Association. We have once more come back to the spot where the Association was organized a quarter of a century ago. Many of you, in coming to this meeting, return to

Alma Mater. No doubt with many this has been the leading inducement to come here. You come to renew the pleasing associations of youth, hoping to grasp once more the hands of the few venerated teachers who still linger on the stage. That with all these attractions this meeting should be the largest in the history of the Association is not surprising. I rejoice with you at seeing such an outpouring of the profession. There is something inspiring in the spectacle here before me. At the same time you will not question my sincerity when I declare to you that I am embarrassed by the duty of having to address so august a body, and would gladly devolve that task on some one better fitted for it than I am.

In proceeding to the discharge of this public duty, I have deemed that I should be safe in pursuing the line of thought marked out for me by many of my distinguished predecessors; I mean in devoting a few words to the subject of Medical Education. This, if it has not been a standing theme before the Association, has been up so often that it would seem hardly respectful to it not to spend a little time in its discussion.

Medical education has been the one absorbing topic, and if there is a single question upon which presidents and committees of Education have agreed, from the first Convention in New York down to the last utterance on the subject at San Francisco, it is that the American system of medical education is radically defective. The Association, year after year, has been invoked to remedy abuses and rescue the profession from impending degradation. The Association indeed originated in this wide-spread feeling of discontent with the prevalent condition of things in the profession. "Reform" was the watchword of the convention which met in New York in 1846. Some of the best men in the profession being convinced that nothing could be done without general coöperation,

the convention was called in the belief that thus reform might be brought about. The members of that convention came together with no very definite plans of action, but with a feeling that something must be done. The idea of reform has been the idea underlying the whole movement and animating its most active members with a zeal which could hardly have been inspired by a less generous cause.

The first meeting of the convention was an encouraging one, and a second one was called to meet here. This Association was organized, and Chapman, then the foremost of all American teachers of medicine, opened his address the next spring at Baltimore with the declaration that "the profession to which we belong, once venerated on account of its antiquity, its varied and profound science, its elegant literature, its polite accomplishments, its virtues, has become corrupt and degenerate to the forfeiture of its social position, and with it of the homage it formerly received spontaneously and universally."

My old neighbor, Professor Henry Miller, in his address to the Association at New Haven, indulged in the same strain. Borrowing the language of Dr. Drake, he declared that "even at this late period the profession abounds in students and practitioners who are radically deficient in spelling, grammar, etymology, descriptive geography, arithmetic, and I might add book-keeping, but that they generally apply themselves to the study of this important branch with a diligence that supplies the want of early opportunities." And he added, "all candid men who have had any experience in medical schools must confess that the examinations of the green room annually reveal a sum of ignorance or of vague and misty perceptions of fundamental medical truth, even in many who are invested with the honors of the doctorate, which is truly amazing. For myself I can most solemnly declare that the most mournful

and humiliating passages in my professional life have been these annually-recurring examinations in which such scanty harvests have been reaped as the reward of a winter's faithful toil."

My distinguished and honored master, Prof. Gross, has more recently expressed himself to the same effect. "The future," he declares, "holds out no promise of amendment. We shall go on from bad to worse until the people can stand it no longer, and then we may hope to be able to effect some reform."

Dr. Baldwin, in his able address at New Orleans, confessed his despair of seeing the evils of our system of education corrected through any of the agencies heretofore employed by the Association, and could see no mode by which it could be accomplished except Federal legislation, through national medical schools incorporated by Congress. "Make the salaries of the professors large," he says, "and not to depend upon the number of students, and let the Federal Government assume a proper share of the expenses incurred."

It may be because my temperament is more sanguine, or it may be because I am a younger man and less experienced in the profession than most of those who have written in this way about its present state and future prospects; but whatever be the explanation, I have to confess that I do not share in these gloomy views and prognostications. Mine is a more cheerful creed. The profession does not appear to my mind "corrupt and degenerate." I do not believe "it is going from bad to worse," and that the people will have to rise in their majesty to stay its downward progress. I can not see the thing in this light at all, and so am not ready to appeal to Federal legislation to correct our evils, and certainly should not go to Congress to establish national medical schools.

Beyond all controversy there are grave defects in the education of many of our students, and of many of our practitioners of medicine. Not a few of them, I am afraid, have very slight acquaintance with grammar or physical geography, and too many of them know little about etymology, and are bad spellers. It is a pity that this is so, and I should be glad to see a different state of things. But are matters in this respect worse than they were in the time of our fathers? Has the case ever been otherwise, do you suppose, in all the history of our profession? At what period was the golden age of medicine, when all who professed it were scholars, and all who aspired to its honors were worthy of them?

My learned friend, Dr. Baldwin, was a student in Transylvania University when that medical institution was at the height of its fame. When quoting, with approbation, the comments of Prof. Drake and Prof. Miller on the spelling and grammar of the students and physicians of our day, he could hardly have forgotten that two of the professors at whose feet he sat with so much profit were understood to be bad spellers and by no means accurate in their grammar. I refer to the illustrious Dudley and his distinguished colleague, Dr. Wm. H. Richardson. Dr. Richardson was much less widely known than his associate; but history will record of him that, despite his grammatical inaccuracies, which often raised a smile on the countenances of his pupils, he maintained himself in the school for twenty-six years—in fact, from the organization of the first faculty down to the day of his death—by the side of such scholars as Caldwell, Cooke, Eberle, Nathan Smith, and Bartlett. Nor did I ever hear that his students or those of his eminent associate complained that one cut with less dexterity for stone or the other was less successful as an obstetrician on account of their imperfect English education.

The case of Dr. Richardson is the more noteworthy from the fact that at the time when he was first appointed to a professorship he was not even a graduate in medicine, but received the honorary degree of M. D. from the College of Physicians and Surgeons of New York after he had delivered a course of lectures and signed at least one diploma.

Nor can it be affirmed with truth that these noted teachers rose to their distinction by force of great intellectual abilities. They were not endowed with extraordinary mental gifts, but achieved success by bending all the powers of their minds to their special pursuits; and by such wise direction of their faculties they made names which filled their country in their day, Dudley placing himself in the foremost rank of lithotomists, and as a teacher at the head of the faculty of Transylvania University. It is not impossible that among the many medical schools of the country instances might be found to-day of scholarship as deficient as these; but if they exist the examples are not so conspicuous. Things may be very bad yet in that direction, but it is doing the profession injustice to say they are growing worse.

And after all, I submit most respectfully whether it is not possible that we have attached too much importance to this humble accomplishment of spelling? A ludicrous blemish assuredly it is on the literary character of any one not to be able to spell correctly, and especially in any one belonging to a learned profession, and it places the individual at a great disadvantage; but I confess I am not able to see why it should prove fatal to success in life, as certainly it did not in the cases just alluded to, and has not done in many others which no doubt occur to you all. Napoleon I., it has been affirmed, never acquired the art of spelling the French language correctly, with all his consummate art in playing

upon the imaginations of the French people. And it is a fact well known to the correspondents of our great Andrew Jackson that he was not a correct speller, notwithstanding that the world believes he was a successful leader of armies, and made a President of the United States whom even his enemies were obliged to respect; and, what is more than all this, as bearing upon the question of etymology and orthography, was actually, in his old age, made a doctor of laws by that renowned old Harvard of which we are so proud.

Complaints similar to those so often repeated here in regard to the education of medical students reach us from other countries and from quarters whence we should least expect to hear them. The profession of Great Britain, with all that it has achieved, is by no means satisfied with the state of things in the medical colleges of that kingdom. "The students who come to our medical colleges," says a late English writer, "are, in a large proportion, deficient in preliminary education, and wholly untrained to any kind of scientific knowledge or method; they come too young and too little instructed."

Education is indeed a plant of slow growth. Systems of education are perfected only by ages of infinite effort. Railways and telegraphs have wonderfully improved intercommunication between the nations of the earth, but art has not yet pointed out any royal road to learning. It takes a boy now as long to learn to read or write a page, or to commit the multiplication table to memory, as it did our forefathers when travel was over miry roads in stage coaches or on horseback. The people learn slowly, and are hardly yet awake to the value of education; and our students of medicine come from the people. Of education it may be said as of nations, it can

not be created; it grows. No wonder then that students sometimes knock at the doors of our medical colleges who have not gone far into arithmetic or physical geography, and are "too little instructed" generally.

But while awarding censure let us be just in its distribution. Let us ask ourselves whether those "vague and misty perceptions of fundamental medical truth," with which teachers complain of meeting occasionally "in the green-room," may not be somewhat chargeable to the learned professors themselves? "I have a strong impression," says Professor Huxley, "that the better a discourse is as an oration the worse it is as a lecture." Possibly some of our teachers may have erred in that direction, and failed from excess of oratory; but I much fear that many more fail in exciting any interest in their pupils. Some I remember to have heard whose lectures had the soporific charm of the divinity course of lectures spoken of by Southey in "The Doctor," the recollection of which twenty years after it was delivered had the power, he declared, of putting him to sleep when every other known narcotic had failed, from "bang to black drop." After such a course one would hardly look for anything better than a "scanty harvest" and "misty perceptions of fundamental truth."

But it is objected to our system of medical education that the schedule in our schools is too meager, and Italy is cited as a country which furnishes us with an example worthy of our imitation. There, we are told, medical students hear lectures, among many other things, on geometry, botany, mineralogy, agriculture, and "the principles of design."

So many of our students out in the West and the South, having served a faithful apprenticeship in the corn-field before coming to our schools, I hope agriculture may be omitted in our curriculum. But why students should be required to study

agriculture, or make themselves acquainted with "the principles of design," is more than I can understand; and why Italy should be held up to us at all as a model in medicine at this day seems to me a little strange. I would by no means do injustice to that country. She has a glorious history, and I trust a brilliant future awaits her. We owe to her in modern times the splendid science of galvanism, which has already done so much to enlarge the boundaries of our knowledge, and promises to do much yet in therapeutics. But it will be admitted that Italian books on medicine are not translated into our language any longer, and that we hear very little nowadays of the medical journals of Italy.

But Germany is appealed to as the medical Utopia, where perfection in the system of medical education has been attained. Let me read you one of the schedules from that marvelous country after which it is proposed the medical schools of America shall model their course of instruction. It embraces the following: 1. Philosophy; 2. Logic and metaphysics; 3. *Æsthetics*; 4. Mathematics; 5. Encyclopedia and methodology of medical science; 6. Botany; 7. Anatomy; 8. Natural philosophy; 9. Chemistry; 10. Zoölogy; 11. Physiology and psychology; 12. Anthropology; 13. Mineralogy in its relations with geognosy; 14. General pathology and therapeutics; 15. *Materia medica* and dietetics; 16. Practical anatomy and practical physiology and pathology; 17. Special pathology and therapeutics; 18. Surgery; 19. Mental diseases; 20. Obstetrics; 21. Pathological anatomy; 22. Comparative anatomy; 23. Pharmacy and the art of prescribing; 24. Epidemiology and climatology; 25. State medicine; 26. And in the hospital, clinical medicine, clinical surgery, clinical ophthalmology, obstetrical clinics, clinics of skin diseases and of syphilis, and chemical physiology and pathology.

Germany at this day aspires to be the leading nation of the earth in thought, in philosophy, in philology, in science, as well as in arms. In perseverance, in industry, in love of science for its own sake, in deep learning, let us admit that no people on earth exceed them. Medicine is cultivated among them with unwearied zeal and assiduity. They have hospitals on the grandest scale; their laboratories are the most ample and best furnished; and all the appliances are to be found in their universities for imparting to students the most thorough knowledge of whatever science or profession they would pursue. Subjects for anatomical study cost a mere trifle. Autopsies by experts abound in the dead-rooms of their hospitals. Students are taught æsthetics, metaphysics, the methodology of medical science, logic, anthropology, geognosy, and the twenty other branches named in their curriculum.

And what, let me ask in a spirit of perfect candor, has it all amounted to? In histology, in pathological anatomy, in microscopy, in animal chemistry, their superiority is conceded. In surgery and in midwifery too we all admit their claims to the highest rank. But the practice of physic in Germany at this time, is it much more than a *meditation on death*? Have not *placebos* taken the place of remedies in their hospitals? Standing idly by while disease is running its course, curiously marking its natural history, looking on calmly while Death and Life-in-death, as described in the "Ancient Mariner," are throwing the dice, and waiting to see whether nature will lose or win in the struggle, the physicians seem intent mainly on tracing its ravages in the cadaver, too well satisfied to find their diagnosis confirmed by the autopsy. Those vast stores of science treasured up by the German mind through the centuries, in what have they resulted? As

to therapeutics, in something hardly better than nihilism; as to physiology, in a materialism which not only abolishes religion but renders any religious belief impossible. To this ghastly complexion it may be that American medicine must come at last, but I am sure no philanthropist can be impatient to see the day.

As one casts his eye over this appalling schedule from Germany, he is reminded of the lines in the old song :

Could a man be secure
That his days would endure,
As of old, for a thousand long years,
What things might he know!
What deeds might he do!
And all without hurry or care.

But if he could, are these the things which, after all, the people want their medical advisers to know? Reduced to the last analysis, what is it that they demand of us as instructors? To give them physicians learned in the languages, or physicians who can discharge the duties of their profession efficiently and well; men who can chop logic, or surgeons who can amputate limbs, or set them, or reduce them; scholars expert in metaphysics, or doctors skilled in the practice of physic? And are not the schools turning out such practitioners? In the main I believe they are, and of higher grade every year. But if I could agree to the German curriculum in all its amplitude, I should still object to the place assigned in it to clinical teaching. With his course on "æsthetics" my student should begin the study of medical and surgical diseases at the bedside. Clinical instruction, in the schedule I would draw up, should be the alpha and omega of the student, and whether he was studying geology or logic he should spend a part of every day examining the cases of sick men, women, and children. After making himself master

of his art he might stray as far as he inclined into the tempting fields of literature and natural history, provided his patients raised no warning voice against it.

We are continually reminded in annual reports that while our schools teach too little there are quite too many of them. I think this is true; but what is to be done about it? Who will say how many schools we shall have, and where? Who has the power to silence one of them? Can we hope to bring our cold, wise maxims of experience so to bear upon the wing of young ambition as to repress it, or to quench the ardor of the youthful spirits who feel that they have a vocation to teach? Time is the only remedy I can see for this sore evil under the sun. Under the pressure of an enlightened public opinion, operating in part through this body for a long series of years, it must give way at last. The schools are obliged to gravitate in time to their places. Those that teach well will be sustained; the inferior will go under.

Twenty-two years ago, in a speech which I had the temerity to make before this Association at Cincinnati, I ventured to predict that no school without an ample supply of subjects and adequate means of clinical instruction could long sustain itself. Time is fully justifying my prediction. And to this test I am satisfied all the medical schools in the world must finally be brought. It is not by logic, or the principles of design, or Greek, or Latin, or French, or German that medical education is to be rendered what it ought to be; but by studying medicine in the laboratory, under the microscope, at the dissecting-table, in the wards of hospitals and in dispensaries where patients are seen, examined, and prescribed for, and where, by attending to what are now so often called the refinements of chemistry and physics,

students learn the diagnosis of disease as well as its treatment. Here in the midst of these clinical demonstrations physic is to be learned, and not by going to universities. Where these are there will be the great medical centers: not necessarily at the great capitals; but none where these means of illustration are wanting.

We labor in vain when we get too far in advance of the people. If we write, it is in the hope of being read; and if we find no readers, our writings, however admirable, are to no purpose. Bring to our country the books produced by the ablest of German authors and how many would be read? Is Rokitansky, or Vogel, or Chelius, or Rindfleisch, or Virchow? By a few, no doubt; but they are "*caviare* to the general." It is not in the direction of elaborate research that the medical mind of America has been running hitherto, or is yet running. In time it will no doubt take that direction; but treatises less elaborate, of less detail, more pointed and more practical, are what the profession demands just now.

Let me cite a case in illustration of the truth of this remark. Just twenty-two years ago a volume was given to the world by an old professor of the University of Louisville, one of my revered teachers, which all our reviewers agreed in pronouncing the most elaborate that had issued from the American medical press. The work was the labor of a life-time, having been projected forty years before in the author's youth. I refer to the great work of Dr. Daniel Drake. It was entitled "A Systematic Treatise, Historical, Etiological, and Practical, of the Principal Diseases of the Interior Valley of North America, as they appear in the Caucasian, African, Indian, and Esquimaux Varieties of its Population." Its wide scope is seen from the title.

To carry out his plan of making it an original treatise, and to render it as complete as possible, Dr. Drake visited all the principal seats of our malarious diseases, his travels of observation extending from Canada to the Gulf of Florida, and from New Orleans to the sides of the Alleghanies, where those diseases cease to prevail. He prepared hydrographic maps, illustrating the topography of the country; he collected one hundred tables, showing the mean temperature, winds, rain, and all that relates to the climate of the wide valley. All that he thought would interest the medical philosopher and practitioner he embodied in his book. "Here," we said, when at last his labors were concluded, "here is a work that will endure and be a treasure for all future writers and students of the diseases of America, Here is a work we are proud of, and which the profession will not willingly let die." My learned predecessor, Professor Stillé, in his report on American medical literature in 1850, said of it: "A superficial inspection of the work has convinced the committee that it belongs to the very highest rank of our medical literature, and may very probably come to be regarded as the most valuable original work yet published in America. It is certainly unrivaled in the amount and variety of its materials. Its distinguished author has raised a durable monument to his own name, and to the medical reputation not only of the great Valley, but of the greater Union."

And how stands the case with the great original work of my old master to-day? After all the years of reading, of research, of travel, of toil in constructing tables, in collecting observations, in sifting reports, what medical school in the country now refers to it as a text-book? It is to be seen in many libraries of the country, but in most of them it is left quietly to collect dust and cobwebs. Not a few physicians,

I am afraid, regard it with no greater favor than a relative of mine, a very intelligent physician in Tennessee, who declared to me soon after it was published that "he wouldn't read it through for a hundred dollars." With the multitude, in truth, a big book continues still to be, what it was in the eyes of the old pagan—a great evil. Dr. Drake seems to have had a presentiment that his book would not be popular. "If," he said in his preface, "the work proves a failure as respects public favor, the author will not be without his reward, for he has found enjoyment in the labor of preparing it." He died before time had been given for testing its popularity. It will not be forgotten. It will live as a storehouse of facts, and be consulted for a long time by authors and teachers; but it was in advance of the generation for which it was written, and is not read by those for whose instruction the author expended so many years of labor.

Very similar, I apprehend, would be the appreciation by the people generally of graduates in medicine educated up to the standard of your model curriculum. In a few favored communities it is possible their stores of metaphysics and æsthetics, of geology and mineralogy, might be prized at their true value; but to the plain, common people these stores would seem little better than "loads of learned lumber." Nay, worse; for too many would conclude that a doctor who had dipped into so many arts and sciences could not have drunk deep of medicine.

When the World's Exposition was in progress at London it was affirmed by the critics that the only thing in which the Americans excelled all other people was "rugged utility." It is in the line of "rugged utility" that medicine with us has advanced with most eminent success. It is in this aspect that it is regarded with most favor by the people everywhere. But

this is not the only line in which the progress of American medicine has begun to attract the attention of the world. It is developing in all directions, and producing authors of acknowledged merit as well as learned teachers and skillful surgeons and physicians.

No one who has been familiar with British medical journals for the last twenty-five years can have failed to note their altered tone in respect to the profession here. Something of this change, no doubt, is to be attributed to the power of time in allaying inveterate prejudices. These for a great while blinded our brethren across the sea to our real merits; but the true cause of their changed tone, let us not hesitate to assert, is to be found in the improved character of our profession. Referring to "the principles and practice of medicine" in our country, Sir Henry Holland, in his charming little volume of "Recollections," says they "are derived from schools of instruction and a medical literature in nowise inferior to our own."

Set down as much as you will of this commendation to the good-nature of the amiable author, still it is the well-considered opinion of one of England's most honored physicians; and whether his countrymen generally would agree with him in the estimate or not, no one of them all would deny that, as a profession, we are every year preferring claims to higher consideration. This indeed is a fact as clear to every observer as the growth of our population, or as our advancement in the mechanic arts and all the elements of national power. Nor is this any partial movement, but an advance all along the line. It has been well compared to those grand geological changes by which continents are slowly elevated above the level of the sea. The quickening impulse is one which has been felt by the profession to its remotest extremi-

ties. The medical schools have acknowledged it, and are generally improving their processes of instruction. In most of them the lecture-term has been extended, the number of professorships has been increased, and the teaching has been rendered more demonstrative. Harvard has inaugurated a part of the system so strongly urged upon the schools, and if it is found to work well it will be universally adopted. The graduates leaving the schools, though they may know less of Greek and mathematics, are far better trained than they were formerly in clinical medicine and surgery, and are better qualified to enter upon their duties as practitioners. Almost every town in every state boasts a surgeon who will attempt lithotomy, and at every cross-roads you will find a physician conversant with physical diagnosis, and who can put up a fractured limb or reduce a dislocation. These graduates are moreover, as a class, men who read and know how to keep pace with the march of medicine. One or more of our medical journals you will find on every physician's table; and so it happens that whatever is discovered or conjectured in Great Britain or on the Continent of Europe in the spring reaches him at his remote home by the beginning of summer.

While returning from California, a year ago, in company with a number of friends now present, the train stopped in the heart of the Rocky Mountains at a water-tank, about which had been built by laborers and miners a few frame shanties. A man in the garb of a miner entered the car, and asked if some physician on the train would not step over to his house and see a sick child? I went with him. The patient was a little boy suffering with some head trouble following measles. He was being calmed during the day by the bromide of potassium, and soothed to sleep at night

by the hydrate of chloral. In the pine-board hut hard by, occupied as home and office by the doctor of the settlement, lay a medical journal of the current month, from the pages of which he gathered the latest utterances of the masters and the newest therapeutic discoveries of the day. There, in those mountain fastnesses, among that rude people a thousand miles removed from the haunts of civilization, where in his lonely rides he saw more antelopes than fellow-men, and heard oftener the shrill yelp of the coyote than the voice of a friend, this hardy pioneer in our art rendered to the sick boy of the miner the same succor that was given by his more fortunate brother to the greatest and richest denizens of the cities, to the very princes of the earth themselves.

There remains yet much to do in our educational system; nor, quoting a thought of Seneca, will the opportunity be wanting to those born after a thousand ages to add something to it. But I think it must strike you all as somewhat unaccountable that results so satisfactory as those just adverted to should flow from a system so essentially bad as ours is represented to be. Is it not something wonderful that these learned authors, these admired teachers, these safe, sagacious practitioners, should have come from schools so wanting in all the means of imparting a good medical education? That, in a word, sons so sturdy should descend from starveling parents? For we must not fail to remark that these men, of whom our country is proud, were, in very large proportion, educated at home. They are of domestic manufacture. The education of all but a few of them was commenced and completed in our own institutions.

Before sitting down I must allude briefly to another question which has occupied a portion of our time at previous

meetings, and can not with propriety be ignored here: woman's right to enter the professions; to become a member of all learned bodies; to do all that she is fitted to do.

Woman is not, as was ungallantly held by Aristotle, an imperfect man, an ill-formed, imbecile being, but in development is as perfect in her sphere as man is in his. Men and women are indeed differentiated beings, one the complement of the other. Each has mental and physical peculiarities, and it is absurd to think of obliterating one class or the other by education or any possible system of training. Education will no more confer upon woman a man's physical attributes than it will give her his beard. The difference between the sexes, which is an organic one, begins to show itself in the infancy of our being. The little boy of eighteen months has tastes differing from those of his twin sister, and at this early age manifests himself an embryo man. The difference widens with the years, and attains its maximum at puberty. At a later day the divergence grows less and less, and on the down-hill of life the sexes become more assimilated again in all their moral qualities.

I shall not take up your time by a discussion of the question of the equality of the sexes. As to equality in physical strength, I believe it has never been claimed. The male in all nations, civilized and barbarous, is the larger and stronger. Anatomy as conclusively settles the question of intellectual equality. The brain of man is, on an average, larger than that of woman; and, other things being equal, size gives strength. We have Sir James Y. Simpson's authority for the statement that "there were lost in Great Britain, from 1837 to 1844, seven years, in consequence of the slightly larger size of the male than of the female head at birth, about fifty thousand lives, including those of about forty-six thousand infants,

and of between three thousand and four thousand mothers who died in child-bed." So that this greater development of the male brain is attained before the child leaves its mother's womb.

But all male heads are not of greater size than the female, and it is far from being true that men are universally stronger in intellect than women. It is unjust to claim for the dominant sex universal superiority. The old school-master in Adam Bede declares "that there is only one thing women can do that men can not—bear children—and that they do in a poor, make-shift sort of way. Better it had been left to men." But in this the old school-master shows himself a sorry physiologist. Woman makes a better nurse than man—how much better all know who have experienced her gentle ministrations, but none so well as those who when sick have been thrown upon the hands of strangers. If the hospitals and infirmaries of the earth could return the sounds which have fallen upon their walls, with what myriad echoes would they testify to her angelic qualities at the bedside of the sick and the dying! And how natural the conclusion, if better nurses, why not at least as good physicians?

In all candor I must say I am unable to find a satisfactory reason why women might not succeed in some lines of our profession. Certain paths there are which, for the honor of the sex, I hope they would not aspire to tread. General Jackson once said of his friend, James Madison, that he "could not look with composure on fields of blood and carnage." I am sure the same might be affirmed with truth of the softer sex. I trust not many would incline to surgery. Very few indeed, I think, would have the nerve to cut for stone in the bladder, or perform ovariectomy. But in tact, in grace, in gentleness, even in learning, they might presume to

rival us, and with these pleasing qualities would be welcome visitors to many a sick-chamber. If young and handsome, I have no doubt valetudinarians of our sex would look for their morning calls as they might for angel visits, only that they would not have them "short and far between."

The best proof that women may make learned doctors is the fact that in times past, if medical history is to be credited, they have given to the profession some members of true erudition. Women taught side by side with men in the first medical school established in the Christian era. Of the names associated with the School of Salernum, none appear more respectable for scientific zeal and attainments than those of the three female professors, Trotula, Rebecca, and Abella, who were ready to grapple the toughest subjects in physiology or medicine. Trotula wrote a dissertation with which many here are, I suppose, well acquainted, *de Mulieribus passionibus*. And so profound was her medical scholarship that when a great disputant, Rudolph Mala Corona, went to this seat of learning to try conclusions in science with its professors, she alone was deemed by him a worthy antagonist. Her sister professor, Abella, was a poet-physician, and indited a treatise, *de Atrabile, et de Natura Seminis Masculini*, in Latin verse. The taste of the learned Rebecca inclined her to the same line of investigation, and the work which has come down to our times from her pen treats *de Urina et de Embryone*.

These mothers in medicine, however, were not prolific; they left no successors worthy of their fame, and their example has not had many imitators in the centuries since they flourished. I have strong doubts whether female physicians will ever become very numerous. Their own sex does not incline very much to them. The movement which is now startling the world by its din will probably end in no great results. But

it depends on the public. What the people decree in this matter is a law to which all, we and the women alike, must bow submissively. If they want women doctors, such will be found ready to meet the demand. If those now pressing forward in their studies so eagerly find their services are not wanted, they will take down their signs, get married—if they can—or turn lecturers, or to some more lucrative employment. I hope they will never embarrass us by a personal application for seats in this Association. I could not vote for that.

This and many other disturbing questions that may arise will be handled by you, I doubt not, with judgment and candor. Nothing, I trust, will fall out during our meeting that can impair the influence now exercised by the Association over the minds of the medical men of our country. We owe it to our professional obligations jealously to guard its interests. It has grown to be a power in the profession, felt and recognized by all as salutary and elevating. Without any exercise of a legislative function, without the exaction of penalties, without any attempt to enforce its recommendations, it has gone quietly on, year after year, confirming its authority by wise suggestions alone. It has submitted a Code of Ethics to the profession which, accepted everywhere as law, favors order and fosters a spirit of harmony among its jarring members. Medicine is a humane and humanizing pursuit, and the Association cultivates all its ennobling tendencies. At the breaking out of our civil war its members were seen ranged on both sides of the line. Entering heartily into the contest like men, they stood shoulder to shoulder with their neighbors; but during all the strife when a surgeon fell into the hands of the enemy he was treated by the surgeons, not as a prisoner of war, but as a brother. And when the fierce struggle was ended, and the crimson gulf that separated us was bridged

over, the Association, with extended arms, invited back its sons from all the sections; and under its banner of peace they met once more as brethren. The Association is making our profession one in heart throughout our borders. May it be perpetual, and more and more a rallying point and a tower of strength for the profession over our whole wide continent.

